



Course Announcement: Tactical Rappel Master Course
(ITRA Qualification Course – 3 year Certification)

Dates: May 22 thru 26 2023

Location: Spokane County Sheriff's Office SWAT Building, 5505 E. Rutter Ave. Spokane WA. 99212

The DAV Tactical Rappel Master (TRM) is a 48 hour course delivered in 5 days designed to give law enforcement officers an alternative safe solution to many situations, and develop true vertical mobility in a tactical situation, that is, an incident that involves a human antagonist, armed or unarmed. This is an advanced level 1 course, and will also address inspections and methodology needed to safely conduct basic rope training for police departments. Course will be held at the Spokane Fire training center, but starting at the Spokane County Sheriff's Office SWAT hanger located at 5505 E. Rutter Ave. Spokane WA. 99212. Components of the class will also occur at the nearby firearms range.

Target Audience: Special Operations police and military units tasked with direct action operations to access areas by a vertical medium (urban or wilderness) to effect an arrest, conduct hostage rescue, rescue / transport downed operators, set up over watches or containment, board vessels, or infiltrate criminal facilities.

Pre-requisites: There is no specific course pre-requisite, but operators attending this advanced level 1+ course should already have basic knowledge of a few knots, donning a harness, basic rappelling (and tie off) and basic ability to ascend a rope. An entry packet with a required knot list and a description of the entry skills test will be sent upon registration. Packet will include links to training videos that demonstrate all entry tests. Operators will be expected to report with all duty gear, entry gear anticipated for vertical access, their duty handgun and / or SBR, 100 rounds of ammunition, and range safety PPE.

Qualifications / Certifications / Records: Course will culminate in a physical skills assessment that will include assessments of learning objectives from the International Technical Rescue Association tactical division. This is a 3 year Rappel Master qualification (certification) that is recorded in the ITRA / ITM database and is referable by any agency seeking verification. Registration into ITRA database is included with course fee. Each student will have a profile established on ITM (if permitted by agency policy). To maintain the qualification, the assessment performance test will have to be repeated every 3 years.

<https://itra.international/>

Course Description: This is an intensive course designed specifically for law enforcement operators to develop true vertical mobility on rope as a single responder and to manage team-based operations. Use of force considerations, actions on contact, tactical medical, and agency policy considerations are integrated throughout. Course is roughly 48 contact hours in 5 days, as it will include slightly extended days and a night operations session after dinner Wednesday. Let DAV know if that is an issue with time rules / OT / union agreements, etc. We'll adapt accordingly and can revise as needed.

Any operator on rope MUST be capable of 2 way travel...UP and down...on demand...no exceptions...independent of top side operators, or they are a liability waiting to happen and create an even more egregious situation. Rope in some situations may not reach the ground. Access to the top may not be possible, thus we teach remote rigging / urban climbing over structures and suspended tie ins in trees, bridges, etc. Operators need to be able to perform these skills in the dark, snow, rain, or shine, equipped with full entry gear, and have a plan for extrication if something goes wrong, or a civilian needs to be extricated. A tactical team with any claim of "vertical capability" must be independently capable of managing the entire operation from risk assessment, site access, anchor planning, rigging, & inspection, and have operators fluent on rope...not dependent of top-based systems run by non-tactical personnel.



TRM is based on single rope techniques (SRT) and Small Party Assisted Rescue (SPAR) tactics used by the most proficient SRT practitioners in the world...cavers and arborists. These are light-weight / go-fast rope professionals that go anywhere, and can do the most with the least amount of gear. The TRM course synthesizes tactical rope operations with these concepts. Our instructors are accomplished practitioners of all three industries. Course is designed for a small unit of 2 to 4 operators working as a team.

There are several role player supported Reality Based Training (RBT) drills embedded in the course to give mission context to the training, and build true confidence in operators so that they **KNOW** they can succeed and win when the time comes, not just *hope* that they can. To that end we integrate full mission gear into training, live fire familiarization drills, night operations, confined space (perhaps water) to build unconscious competence.

It is possible we may also be able to deliver the 3 ITRA Learning Objectives for helicopter based rappel and extraction. Details to follow.

Entry Skills Test for this course: 10 knots (list to be provided) in 20 minutes. Ability to don a harness, and perform a 10 meter rappel, tying off the DCD (descent control device) for a hands free stop, starting with all gear in a pack in 10 minutes.

Rough list of topics to be covered (may be adjusted based on student / agency needs):

- Integrating entry kit with vertical kit
- Vertical rope missions and planning
- Building side / floor identification / numbering
- Use of force considerations / liability management
- Safety / Briefings / Commands /
- Suspension trauma / medical
- Operational Planning for tactical rope missions
- Equipment use and selection
- Rope characteristics and selection
- Rigging theory (angles, fall factors, etc.)
- Various anchors (industrial, trees, vehicles, artificial pro, human, multi-node load sharing / distributing, stemples, improvised, etc)
- Remote rigging (shooting lines over structures, trees, etc.)
- Basic simple and compound haul systems and progress captures
- Top based lower and raise system
- SRT anchors and edge mitigations
- Contingency anchors
- Belay techniques
- Rappelling with different devices / tie off / proving descenders / self-belay / using leg bags
- Clear a jammed descender
- Rope climbing systems / down climbing
- Changeovers
- Knot passes
- Line changes
- Difficult edges / edge transitions (under-cut edges, helicopter skids, bridges, etc.)
- Bail outs / roll outs
- Inverting on rope / observation / hang test
- Moving as team on rappel / cover / entries at window or balcony





- Climbing tandem (2 operators at same time)
- 2 person rappel / rescue
- Basic pick offs
- Night operations / rigging / rappel / NVD's
- Extrication scenarios (day and night)
- Tactical Combat Casualty Care (TCCC)
- Basic live fire familiarization with vertical kit and on rope.
- Confined space / SCBA familiarization (optional)
- Basic Communication and command tactics
- Helicopter rappel & extraction (tentative for the helicopter endorsement)

Equipment: All ropes and vertical gear CAN be provided by Direct Action Vertical, but we encourage participants to try using the gear issued to them by their department. There ARE some restrictions on gear (certain rappel devices like ATC, etc. not allowed), which will be covered in the pre-course checklist. While heavy SPRAT / NFPA gear and harnesses are allowed, we strongly recommend lightweight caver style tactical harnesses that mesh well with assault gear. Speed in donning and vertical movement is safety in the tactical realm, which is why your rope course assessments are timed. You are already carrying a lot of extra mission gear for entry.

Course Fee: \$1100.00 each

Registration Link: Scan QR code at right or go to:

<https://directactionvertical.regfox.com/tactical-rappel-master-course-3-year-certification>

Course is capped at 12.

Includes: 48 hours contact, ITRA assessment, student manual, course patch, Rappel Master patch, ITRA member registration fee, dinner of night operations, and basic cordage (tubular webbing, prusik cord.) Gear can be signed out to operators for the course. (Please advise in advance)



Pre-Course Documents: Upon completing registration, we will provide you with pre-course equipment check list, knot list, pre-course reading, and video of entry test / scoring criteria.

/s/ *Eduardo L Cartaya*

Eddy Cartaya

Direct Action Vertical, Inc.

ITRA # 14956, President, Rope / Tactical

eddy@directactionvertical.com

www.directactionvertical.com

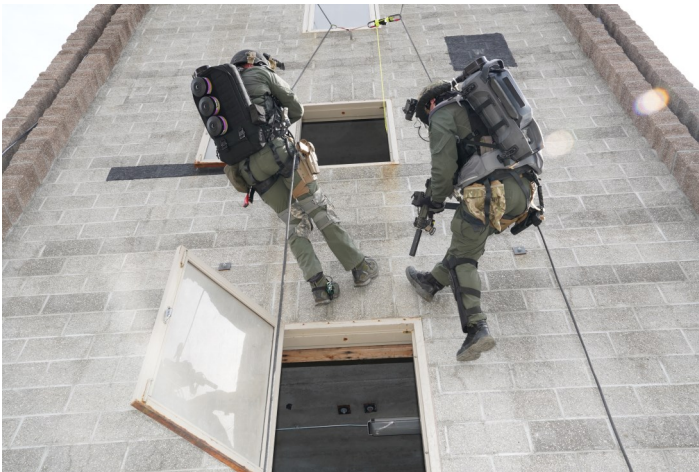
<https://www.facebook.com/directactionvertical>

541-213-6257



International Technical Rescue Association

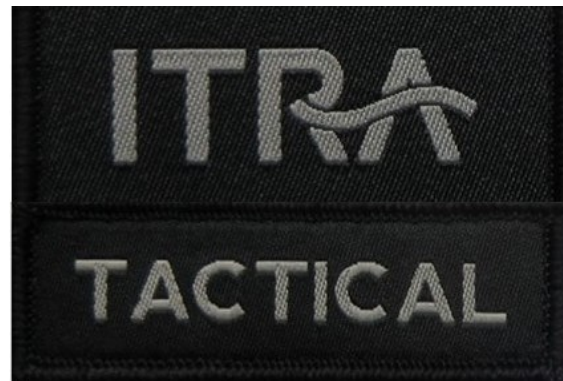
Tactical Rope Operations Qualification Program



ITRA Tactical 1 (Level 1 references: Type 3, trainee, basic, operator)

Target Audience: Tactical operators with little to no prior rope rescue / operations experience.

Intent: To make ITRA Tactical 1 obtainable and desirable as a baseline qualification for virtually ANY agency that claims or wishes to have a tactical rope program.



Core Skill Sets: Anchors, knots, basic rigging, edge safety & mitigation, inspect harnesses & systems, forces, basic SRT (up and down), self rescue, basic approach and entry into windows & balconies, integrating mission critical kit with vertical systems, and basic top based rescue with contingency anchor lowers and raises.

Summary of Resulting Qualification Capability: A tactical officer should not deploy on rope on a live mission without being capable of 2 way travel (up and down), passing edges and knots, being able to resolve any hang ups or problems on rope independently, and deal with BASIC obstacle s and functions on rope, to facilitate access, entry, or rescue. Being able to invert to visually clear a window, and perform basic entries is considered a basic function. Officer should also be able to rig / inspect / operate a contingency SRT anchor system to lower an injured operator, or conduct a top side haul. Operator should NOT be dependent on someone else or a fire agency to do this for them. This includes placing edge protection and assisting with simple edge problems. T1 officers should also have their tactical kit well integrated with their vertical gear, and be able to perform rope tasks with ALL gear on...AND...be able to perform all subsequent entry / tactical tasks with their vertical gear on, with neither impeding the other. Must be capable of operating at dark using white / red light. (night vision devices are in level 2)

Rescue Ability on Single Rope Technique: Self rescue. Able to deal with a range of non-routine situations in personal vertical systems and operations.

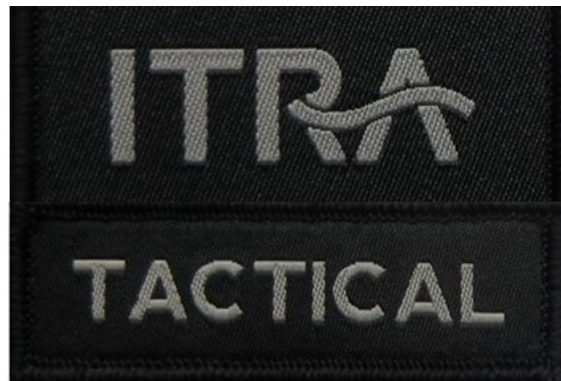
Anticipated Role in Tactical Mission: Likely that of a support role, rigging / manning top side anchors, conducting lower risk or straight forward missions. May follow level 2 or 3's as subsequent entry team after 2's or 3's take point and make initial entry. Will typically support or accompany an ITRA level 2 or 3 operator.

Rationale: Many departments have lesser emphasis on a tactical rope program as they seldom recognize opportunities for its use. The intent of this first qualification is to get such departments to raise their standards to a baseline where every officer on rope has sounds BASIC skills. If the entry level qualification is *too* advanced, they are not likely to invest the time and training to pursue it. It should be *easily obtainable* so as to achieve base line proficiency, and encourage others to advance to qualifications 2 or 3.

ITRA Tactical 2 (Level references: Type 2, support, intermediate, leader)

Target Audience: Tactical operators who have previously qualified with ITRA Tactical 1, OR possess solid mastery of tactical ropes basics. This would be the primary level for most full time operators on a tactical rope team.

Intent: This is the “workhorse” qualification. Most missions should be doable with this qualification.



Core Skill Sets: Full tactical mobility on SRT. Able to negotiate virtually any conceivable rope obstacle confidently, in darkness, wet, or confined space, while wearing full assault gear. Operate mid-pitch deviations / apparatus. Tactical litter packaging and transport for hasty extrications. Interventions with *conscious / cooperative* subjects.

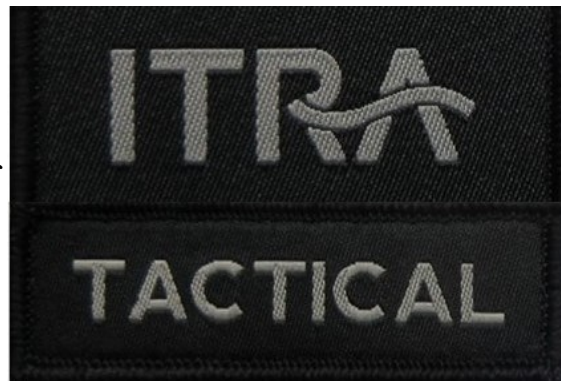
Summary of Resulting Qualification Capability: Full tactical mobility on SRT...can go anywhere there is a rope or nylon product capable of human load. Able to utilize body weight to effect small weight transfers to break into loaded lines or make small lifts to solve stoppages on rope. Able to travel horizontal lines, off sets, guidelines. Conduct mid-line rescues or interventions for conscious / cooperative subjects in a tactical environment (stuck operator, hostage extrication, etc.) Handle 2 person loads on rope. Traveling hauls and simple counterweight rescue concepts. Able to perform all SRT tasks with helmet mounted NVG's.

Rescue Ability on Single Rope Technique: Take care of another person who is conscious / cooperative, or in a litter as part of a team based rescue. (Unconscious SRT pick off's are assessed in level 3. They might be trained in in any course based on clientele, but for the purpose of ITRA leveled tactical qualifications, SRT pick-offs of unconscious or non-compliant personnel are considered advanced interventions and reserved for level 3 qualification.)

Anticipated Role in Tactical Mission: Level 2's will typically take “point” as in first over an edge or up a rope that has been remotely deployed if no mid-face rigging is anticipated. May be supported on rope team by level 1's on lower risk missions or rescues. Fully mission capable in all but the most complex or committing vertical missions.

Rationale: This should be the journey-man level for most operators functioning on a rope team. If they go no higher, they should still be fully functional for most missions. The focus is getting the operator fluent on rope travel and confident with using their own weight and gear to effect compliant interventions.

ITRA Tactical 3 (Level references: : Type 1, advanced, scene commander, technician, instructor)



Target Audience: Tactical operators who have previously qualified with ITRA Tactical 2 OR possess solid mastery of SRT, weight transfers, and compliant interventions. This would be the highest level for the leaders of a tactical rope team, and a pre-requisite for being a formal tactical rope operations instructor. Research and develop new techniques, applications, and equipment. Operators who deal with high rise structure challenges, complex vertical protester interventions, hostage rescue teams, extremely remote (military / hostile territory incursions), criminal facility incursions, hazardous atmospheres, etc.

Intent: This is the technician level, or technical advisor to scene commander that would assess the vertical situation, prescribe a plan, and supervise or manage the execution. Assists with the training for the agency / department's rope program under a qualified instructor. Takes point on the most technical missions, where mid-pitch improvisation is likely or expected (as in a non-compliant intervention.)

Core Skill Sets: Rigging mid-pitch deviations, horizontal lines, guidelines, etc. All manner of pick offs where raising full body weight of subject is required. Climbing with improvised or partially disabled SRT system. System analysis of suspect rigging that may be rigged to fail or cause injury (common vertical protester tactics). Ability to conduct level 2 skills with minimal gear, with a patient in tow, or in compromised atmospheres. Vertical mission planning. Urban climbing, including use of aid anchors, bolts, etc.

Summary of Resulting Qualification Capability: Focus is risk assessment, mission assessment, problem solving, advanced rescue interventions, and RIGGING mid-pitch features, highlines, guidelines, etc. Able to assess suspect rigging for vulnerabilities or willful failure traps. Master of Small Party Assisted Rescue (SPAR) concepts. Able to stack counterweight systems, create improvisational hybrid systems, and perform with mask in place. Take lead in coordinating and facilitating tactical vertical training events and program management.

Rescue / SRT Intervention Ability: Take care of an unconscious person on rope, to include travel through mid-pitch obstacles, and / or perform interventions with a non-compliant / uncooperative subject. Able to piggy back an external system onto a suspect system and perform cutaways.

Anticipated Role in Tactical Mission: Assess the vertical problem and advise scene commander on courses of action. Take lead in rigging advanced solutions. Takes point on first descent or first ascent when mid-pitch rigging is anticipated (mid pitch deviations, offsets, adding a rope to extend reach, bolts, aid, etc.) Lead on contacting vertical protesters or suicide jumpers.

Rationale: Every agency / department with a rope program should have at least one level 3 on the team, but preferably more to assist conduct training, and be available for different shifts.



Tactical Rescue 1

Tactical Rope Responder

1

701	Tactical	Concepts for building side & window numbering reference systems for planning	K
702	Tactical	Roof top anchors / anchor assessments / hazards (electric, microwave, episodic heat emissions, etc)	K
110	Rope	Basic knots for rescue (regional basis)	S
111	Rope	Basic equipment for rope rescue	K
113	Rope	Simple mechanical advantage rigging	S
258	Rope	Protection of rope systems (edge protection, hazard identification & mitigation)	S
259	Rope	Selection and construction of single point anchors	S
260	Rope	Selection and construction of multi point anchors	S
261	Rope	Edge lines, restraint, and/or work positioning systems	S
715	Tactical	Personal ascending (includes down climbing)	S
716	Tactical	Personal descending (includes proving descenders after install)	S
264	Rope	On-rope self rescue (jammed descender, foot lock, malfunctioning climbing system, etc.)	S
714	Tactical	Escape a rappel where the line below has been loaded by a suspect	S
267	Rope	Rig and operate a lowering system (one and two person load)	S
268	Rope	Rig and operate a raising system (one and two person load)	S
703	Tactical	Change over (both directions)	S
704	Tactical	Knot pass on ascend / descent	S
289	Rope	Rope rescue physics 1 (fall factors, anchor angles, shock loads, etc.)	K
299	Rope	Releasable/Contingency Anchors	S
311	Rope	Vehicle anchors	S
705	Tactical	Inverted rappel	S
706	Tactical	Perform weapon management on rope	TBS
707	Tactical	Operate self-belay and ground-belay in tactical rappel activities	S
708	Tactical	Perform tactical window and balcony entries on rappel with tactical PPE	S
709	Tactical	Carry out tactical rappel operations in limited visibility (red light or NVG) and with noise distractions /	TBS
710	Tactical	Prepare, rig and deploy ropes for tactical activities (Leg bags / rope bags, daisy chains, etc.)	S
711	Tactical	Buddy Check (of vertical kit and compatibility with assault kit)	S
712	Tactical	Rig & operate bail out kits	S
713	Tactical	Don, inspect, and check tactical and rope protective equipment to ensure compatibility	S
348	Generic	Single person: lift, drag and carries (casualty handling)	S

Endorsements

Rappelmaster (RM) Endorsement for Level 1 Qualification:

- Must assess ALL Tactical level 1 LO's (level 1 pre-req)
- Additionally must assess from level 2:
 - ⇒ ITRA-721: Advanced anchors
 - ⇒ ITRA-295: Retrievable rappel
 - ⇒ ITRA-305: On Rope line transfer
 - ⇒ ITRA-316: Improvised Harness
 - ⇒ ITRA-730: Pick off of a conscious cooperative subject on rope
 - ⇒ ITRA-736: Inspect a rope rescue system for critical fails and proper operation (4 to 7 deficiencies)



Tactical Rescue 2

Tactical Rope Technician

2

721	Tactical	Advanced anchors (Tree anchors, stemples / knot jam anchors, etc.)	S
722	Tactical	Remote rigging / throw line operations / remote installation of edge protection / hooks	TBS
723	Tactical	Human anchors, deviations, and edge mitigations	S
724	Tactical	Mechanical Advantage systems (compound)	S
220	Rope	Independent belay/safety systems for rescue loads	S
289	Rope	Rope rescue physics 2 (T-method, closed loop rigging, torque on tree branches, etc.)	K
295	Rope	Retrievable rappel	S
306	Rope	Negotiate deviation	S
307	Rope	Negotiate re-anchor	S
725	Tactical	Negotiate a guideline rappel and ascent	S
305	Rope	On Rope line transfer	S
726	Tactical	Pass a stuck / immobilized person on rope in both directions	S
316	Rope	Improvised harnesses	S
727	Tactical	Perform loaded changeover of rescue system (raise to lower, lower to raise)	S
728	Tactical	Pass knot through rescue system in both directions	S
730	Tactical	Demonstrate an SRT pick off technique of a conscious / cooperative subject on rope	S
731	Tactical	Evacuation of unarmed civilians—high angle / operator descent	S
732	Tactical	Rig and operate a bottom operated traveling haul	S
734	Tactical	Tandem / Trandem team rope climbing	TBS
735	Tactical	Rig and operate retrievable gap crossing lines	TBS
349	Generic	Team based: lift, drag and carries (casualty handling)	TBS
736	Tactical	Inspect a rope rescue system for critical fails and proper operation (4 to 7 deficiencies)	S
757	Tactical	Rig and negotiate a cable ladder	S



289	Rope	Rope rescue physics 3 (highline forces, deviation anchor forces.)	K
291	Rope	Pick off rescue - unsuspended/unsecured victim (i.e. from ledge)	S
292	Rope	Pick off rescue - suspended victim (unconscious) (single rope technique)	S
281	Rope	Select and erect an artificial high directional (monopod, bipod, or tripod)	S
314	Rope	Establish dead-man anchor	S
338	Rope	Compound and complex mechanical advantage systems	S
339	Rope	Guiding line off-set (lower)	S
399	Confined Space	Identification, types and definition of confined space	K
400	Confined Space	knowledge of confined space hazards	K
733	Tactical	Conduct a diminishing loop ascent and changeover to rappel with a conscious person	S
751	Tactical	Perform tactical at-height restraint techniques for law enforcement	S
752	Tactical	Highline—rapid techniques	S
754	Tactical	Urban climbing (grappling hooks, container climbing, use of rock pro for aide progression)	S
312	Rope	Knowledge of picket/ground anchor systems	K
759	Tactical	Break into a loaded line and convert to raise / lower with and without a 2nd rope	S
760	Tactical	Piggy back closed loop intervention system onto existing protester line / system / cut away	S
762	Tactical	Counterweight haul systems (climbing, rappelling, stacked systems)	S
763	Tactical	Rigging and accessing an up and over obstacle with human anchors both sides (aircraft, monument, etc.)	TBS
764	Tactical	Perform tactical at-height suicide intervention	TBS

Endorsements

Helicopter (HO) Operations Endorsement:

Must complete:

1. All ITRA Tactical level 1 LO's
2. *Either* the Rappel Master endorsement for level 1 or Level 2
3. Additional designator's 106, 791, & 792 & 793



Tactical Rescue

Additional Designators

AD

729	Tactical	Tactical stretcher Operations (Prepare, rig, and handle stretcher in Tactical environment)	TBS
756	Tactical	Demonstrate lead climbing techniques on natural and / or man made surfaces	S
758	Tactical	Escape / reset a fall arrest device (ASAP, Goblin, etc) without top side assistance	S
761	Tactical	Inspecting / defusing protestor decoy rigging safely	S
780	Tactical	Perform tactical rope operations in compromised atmosphere with SCBA / APR's	S
279	Rope	Tower climbing technique	S
280	Rope	Tree climbing techniques (basic)	S
781	Tactical	Tree Canopy rescue operations (para-rescue)	S
782	Tactical	Use of cutting tools to effect vertical rescue (chainsaw / handsaw in trees, cutters, etc.)	S
783	Tactical	Tree Canopy intervention operations (protester intervention)	S
784	Tactical	Aerial blockade interventions (monopods, bipods, cantilevers, etc)	S
785	Tactical	Use of micro-systems for ascent / remote venue operations	S
786	Tactical	Setting a bolt with impact drill in rock or concrete	S
790	Tactical Instructor	Plan, resource, and deliver a field based / psycho-motor block of instruction on a tactical rope topic, that involves the use of munitions, role players, non lethal training ammunition, etc.	S
294	Rope	Rope rescue medical considerations (suspension trauma, vertigo etc)	K
787	Tactical	Skylight entry with / without AHD	TBS
788	Tactical	Prepare canine for tactical entry in high angle environment	S
791	Tactical	Demonstrate the ability to tactically insert onto a flat (non-technical) surface from a hovering helicopter using a single or double rope rappel.	S
792	Tactical	Demonstrate the ability to tactically extract from a flat (non-technical) surface using a single rope anchored to a hovering helicopter.	S
793	Tactical	Demonstrate the ability to deal with personal non routine situations whilst rappelling (single or double rope) from a hovering helicopter.	S
106	General	Basic safety Around Aircraft	K